

IN THE CLAIMS:

Claim 1 (currently amended): A metal building, comprising:

- a) a slab that supports a plurality of walls that meet at a plurality of corners and that are formed of generally vertically oriented metal panels, each wall having a wall outer surface and a wall inner surface, the metal panels including wall panels each having an enlarged planar front panel with inner and outer surfaces and opposing wall panel edge portions connected to opposite sides of the enlarged planar front panel, each wall panel edge portion having a side panel section with two spaced apart vertical rows of staggered slits or slots with gaps between slits or slots of one row aligning with slits or slots of the other row for retarding heat transfer across each side panel section;
- b) the metal panels including a plurality of corner panels at each corner of the building, each corner panel having opposing corner edge portions that connect with a pair of wall panels at wall panel edge portions;
- c) the wall panel edge portions of one wall panel connecting with edge portions of two other metal panels;
- d) each of the wall panel edge portions having flanged portions that extend toward each other;
- e) connections that join the metal panels together being defined by interlocking sections that are Z-shaped and that extend transversely with respect to the wall outer surface;
- f) the wall inner surface being defined by a veneer that is connected to the metal panels at the flanged portions; [[and]]
- g) an insulation layer cladding the inner surface of each enlarged planar front panel between the opposing wall panel edge portions;
- h) the corner panels at each corner comprising:

one ending panel having one of the corner edge portions for connecting to an edge portion of an adjacent wall panel at a Z-shaped interlocking section, and a planar outside panel plate extending at an angle from the Z-shaped interlocking section and into the corner and having no flange portion;

a starting panel having the other corner edge portion of the corner panel for connecting to an edge portion of an adjacent wall panel at a Z-shaped interlocking section, and an opposing flange portion extending into the corner, the planar outside panel plate of the ending panel overlapping the opposing flange portion of the starting panel;

i) an outside L-shaped panel engaged over the outside of the planar outside panel plate of the ending panel and over the outside of the opposing flange portion of the starting panel to form an outside of each corner;

j) an inside L-shaped panel spaced inwardly of the outside L-shaped panel to form an inside of each corner; and

k) a plurality of fasteners for connecting the metal panels to each other.

Claim 2 (original): The metal building of claim 1 wherein at least one wall has a window, wherein a plurality of short wall panels are below the window.

Claim 3 (previously presented): The metal building of claim 1 wherein at least one wall has a door, each wall including an upper longitudinal beam and a lower longitudinal beam, each beam having a web and a pair of opposite flanges extending at about a right angle to the web, at least one flange of the lower beam having at least one L-shaped slot therein that extends partly to the web for draining water from the lower beam.

Claim 4 (original): The metal building of claim 2 wherein the wall panels and the

window each have a width, the window width being greater than the width of the plurality of short wall panels that are positioned below the window.

Claims 5-17(cancel).

Claim 18 (currently amended): A metal building, comprising:

- a) an underlying support;
- b) a plurality of metal walls providing an outer wall surface;
- c) the walls supporting a roof;
- d) the metal walls connecting at corners;
- e) each metal wall being comprised of a plurality of metallic wall panels connected together at panel joints, each wall panel having a first section with opposing end portions and second and third sections attached respectively to the first section end portions, there being an insulation layer cladding an inner surface the first section between the end portions;
- f) each of said second and third sections extending away from the first section and having a Z-shaped portion;
- g) each Z-shaped section having a free end portion that carries at least one flange, the flanges of the Z sections of a wall panel extending toward each other; [[and]]
- h) at least one corner having [[a]] Z-shaped ~~portion~~ portions that interlocks with a Z-shaped portion of [[a]] each adjacent wall panel, the corner comprising:
 - one ending panel having one Z-shaped portion for connecting to an end portion of an adjacent wall panel, and ~~an opposing edge portion extending to a planar outside panel plate extending at an angle from the Z-shaped portion and into the corner and having no flange portion;~~
 - a starting panel having one Z-shaped portion for connecting to an end portion

of an adjacent wall panel, and an opposing flange portion extending into the corner with the planar outside panel plate of the ending panel overlapping the opposing flange portion of the starting panel;[[.]]

an outside L-shaped panel engaged over an outside of the ~~opposing edge portion~~ planar outside panel plate of the one ending panel and over an outside of the opposing flange portion of the starting panel to form an outside of the corner; and

an inside L-shaped panel spaced inwardly of the outside L-shaped panel to form an inside of the corner; and

i) a plurality of fasteners for connecting the wall panels to each other.

Claims 19-26 (canceled).

Claim 27 (original): The metal building of claim 18 wherein one of said second and third sections has five flat sections.

Claims 28-30 (canceled).

Claim 31 (original): The metal building of claim 18 further comprising a header connected to the top of the wall panels.

Claim 32 (canceled).

Claim 33 (original): The metal building of claim 31 wherein a pair of said flanges extend upwardly.

Claims 34-35 (canceled).

Claim 36 (currently amended): A metal building, comprising:

- a) an underlying support;
- b) a plurality of metal walls providing an outer wall surface;
- c) the walls supporting a roof;
- d) the metal walls connecting at corners;

e) each metal wall being comprised of a plurality of metallic wall panels connected together at panel joints, each wall panel having a first section with opposing end portions and second and third sections attached respectively to the first section end portions;

f) each of second and third sections including a side panel with two spaced apart vertical rows of staggered slits or slots with gaps between slits or slots of one row aligning with slits or slots of the other row for retarding heat transfer across each side panel, each of said second and third sections also extending away from the first section and having a Z-shaped portion;

g) each Z-shaped section having a free end portion that carries at least one flange, the flanges of the Z sections of a wall panel extending toward each other; [[and]]

~~h) at least one corner comprising a pair of vertically extended members of the metal outer wall surface, the other member not being part of the metal outer wall surface~~ at least one corner having a Z-shaped portion that interlocks with a Z-shaped portion of a wall panel, the corner comprising:

one ending panel having one Z-shaped portion for connecting to an end portion of an adjacent wall panel, and a planar outside panel plate extending at an angle from the Z-shaped portion and into corner and having no flange portion;

a starting panel having one Z-shaped portion for connecting to an end portion of an adjacent wall panel, and an opposing flange portion extending into the corner with the planar outside panel plate of the ending panel overlapping the opposing flange portion of the starting panel;

an outside L-shaped panel engaged over an outside of the planar outside panel plate of the one ending panel and over an outside of the opposing flange portion of the starting panel to form an outside of the corner; and

an inside L-shaped panel spaced inwardly of the outside L-shaped panel to form an inside of the corner; and

i) a plurality of fasteners for connecting the wall panels to each other.

Claim 37 (currently amended): The metal building of claim 36 wherein at least one wall has a window, each wall including an upper longitudinal beam and a lower longitudinal beam, each beam having a web and a pair of opposite flanges extending at about a right angle to the web, at least one flange of the lower beam having at least one L-shaped slot therein that extends partly to the web for draining water from the lower beam.

Claim 38 (canceled).

Claim 39 (previously presented): The metal building of claim 37 wherein the wall panels and the window each have a width, the window width being greater than the width of a plurality of the wall panels that are positioned below the window, at least one vertical columns having a column part with a recess for receiving part of a wall panel at one side of the window by a selected amount for setting an effective width opening of the window.

Claim 40 (previously presented): The metal building of claim 39 further comprising a truss over the window, the truss having edge portions that connect to wall panel edge portions.

Claim 41 (canceled).

Claim 42 (original): The metal building of claim 40 further comprising a pair of vertical columns that support the truss at positions on opposing sides of the window, wherein the distance between the columns is greater than the window width.

Claim 43 (original): The metal building of claim 42 wherein each column supports an end portion of the truss.

Claims 44-52 (canceled).

Claim 53 (currently amended): The metal building of claim ~~[[51]]~~ 18 wherein each wall panel has a void space in between the second and third sections and ~~[[the]]~~ insulation is positioned in the void space.

Claims 54-68 (canceled).

Claim 69 (currently amended): A metal building, comprising:

- a) a slab that supports a plurality of walls that are formed of generally vertically oriented metal panels having upper and lower ends, an upper longitudinal beam connected to the upper ends of the panels and a lower longitudinal beam connected to the lower ends of the panels, the lower longitudinal beam having a web that rests upon the slab and an outer flange having at least one L-shaped slot therein that extends partly to the web for draining water from the lower beam, each wall having an outer surface and an inner surface, the metal panels including wall panels having opposing wall panel edge portions;
- b) the metal panels including a plurality of metal corner panels having opposing corner edge portions that connect with a pair of wall panels at wall panel edge portions, each corner panel comprising:

one ending panel having one Z-shaped portion for connecting to an end portion of an adjacent wall panel, and ~~an opposing edge portion~~ a planar outside panel plate extending at an angle from the Z-shaped portion extending to the corner and having no flange portion;

a starting panel having one Z-shaped portion for connecting to an end portion of an adjacent wall panel, and an opposing flange portion extending into the corner with a planar outside panel plate of the ending panel overlapping the opposing flange portion of the starting pane;[[,]]

an outside L-shaped panel engaged over an outside of the ~~opposing edge portion~~ a planar outside panel plate of the one ending panel and over an outside of the opposing flange portion of the starting panel to form an outside of the corner; and

an inside L-shaped panel spaced inwardly of the outside L-shaped panel to form an inside of the corner;

c) wherein the wall panel edge portions of one panel connecting with edge portions of two other metal panels;

d) each of the panels having flanged portions that extend toward each other;

e) connections that join panels together being defined by the Z-shaped interlocking sections and that extend transversely with respect to the wall outer surface;

f) the wall inner surface being defined by a veneer that is connected to the metal panels at the flanged portions; [[and]]

g) a cover that attaches to the walls and shields at least part of the interior; and

h) a plurality of fasteners for connecting the metal panels to each other.

Claim 70 (original): The metal building of claim 69 wherein at least one wall has a window.

Claim 71 (canceled).

Claim 72 (original): The metal building of claim 70 wherein the wall panels and the window each have a width, the window width being greater than the width of a plurality of the wall panels that are positioned below the window.

Claim 73 (original): The metal building of claim 72 further comprising a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions.

Claims 74-82 (canceled).

Claim 83 (currently amended): The metal building of claim ~~[[68]]~~ 69 wherein each corner ~~has corner panel sections forming~~ forms an angle of about 90 degrees, the ~~panel sections starting and ending panels~~ having different dimensions.

Claims 84-85 (canceled).